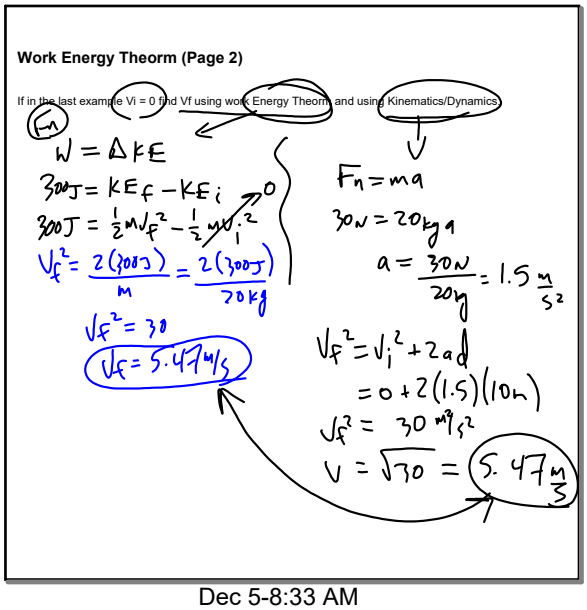
Work Energy Theorm (Page 2)
If in the last example Vi = 0 find Vf using work Energy Theorm and using Kinematics/Dynamics
W = ΔKE
300J = KEf − KEi
300J = ½mVf² − ½mVi²
Vf² = 2(300J)/m = 2(300J)/20kg
Vf² = 30
Vf = 5.47 m/s
Fn = ma
30N = 20kg a
a = 30N/20kg = 1.5 m/s²
Vf² = Vi² + 2ad
= 0 + 2(1.5)(10m)
Vf² = 30 m²/s²
V = √30 = 5.47 m/s

Dec 5-8:33 AM